

Claims:

SUB A27 1. A method of centralised data position information storage and utilisation comprising the steps of:

5 arranging a byte stream of data into partitioned logical data;

storing data position information relating to said logical data in a reserve storage area;

10 transferring said information from said reserve storage area to a centralised storage area, wherein said centralised storage area is configured to store said information relating to substantially all said partitioned logical data; and

15 utilising said information in said centralised storage area to locate a target data being part of said logical data.

2. The method as claimed in claim 1, wherein said step of utilising said logical data position information comprises:

20 applying a search algorithm to said data position information;

wherein said search algorithm is configured to locate said target data.

25 3. The method as claimed in any one of claims 1 or 2, wherein said logical data comprises:

records and filemarks; wherein said centralised storage area is configured to store data position information relating to said records and said filemarks in a data table.

4. The method as claimed in claim 1, wherein said centralised storage area is configured to store logical data position information relating to a plurality of selected logical data groups.

5 5. A method of storing and utilising data position information on a tape data storage device, said method comprising the steps of:

arranging a byte stream of data into partitioned logical data and recording said logical data onto a length of tape;

10 storing data position information relating to said logical data in a reserve storage area;

15 transferring said information from said reserve storage area to a centralised storage area located within said tape device, wherein said centralised storage area is configured to store said information relating to substantially all said partitioned logical data; and

20 utilising said information in said centralised storage area to locate a target data on said tape, said target data being part of said logical data; and

reading said target data using a read head.

25 6. The method as claimed in claim 5 wherein the step of transferring said data position information comprises:

transferring said information to a data table within said centralised storage area;

wherein said information within said data table is arranged so as to minimise a time period taken to locate said target data on said tape when utilising said information.

5 7. The method as claimed in claim 5 wherein said step of utilising said data position information comprises:

applying a search algorithm to said data position information, wherein said search algorithm is configured to locate said target data; and

10 determining a required transporting of said logical data passed said read head to allow said target data to be read.

15 8. The method as claimed in claim 5, wherein said data position information in said centralised storage area relates to a plurality of selected data groups, said data groups being distributed across said length of tape.

20 9. The method as claimed in claim 5 further comprising the step of:
transferring said data position information within said centralised storage area to a reserve storage area.

25 10. A data position information storage and utilisation device comprising:

partitioned logical data distributed across a length of tape;

a reserved storage area to store data position information relating to said logical data;

30

a centralised storage area configured to store said information received from said reserve storage area, said centralised storage area being configured to store information relating to substantially all said partitioned logical data; and

5 a search algorithm to locate a target data on said tape; and

a read head configured to read said logical data on said tape;

10 wherein said device is operable, in response to a request for said target data, to locate said target data on said tape using said information in said centralised storage area and to read said target data using said read head.

11. A device as claimed in claim 10 wherein said reserve storage area is located on at least one portion of said tape.

12. A device as claimed in claim 10, wherein said reserve storage area is a cartridge memory.

13. A device as claimed in claim 10, wherein said centralised storage area is located substantially within a tape drive, said tape drive being configured with said read head.

14. A computer program comprising program commands for implementing a method of centralised data position information storage and
25 utilisation, said method comprising the steps of:

arranging a byte stream of data into partitioned logical data;

30 storing data position information relating to said logical data in a reserve storage area;
P711.spec

transferring said information from said reserve storage area to a centralised storage area, wherein said centralised storage area is configured to store said information relating to substantially all said partitioned logical data; and

utilising said information in said centralised storage area to locate a target data being part of said logical data.

15. A computer program comprising program commands for implementing a method of storing and utilising data position information on a tape data storage device, said method comprising the steps of:

arranging a byte stream of data into partitioned logical data and recording said logical data onto a length of tape;

storing data position information relating to said logical data in a reserve storage area;

transferring said information from said reserve storage area to a centralised storage area located within said tape device, wherein said centralised storage area is configured to store said information relating to substantially all said partitioned logical data; and

utilising said information in said centralised storage area to locate a target data on said tape, said target data being part of said logical data; and

reading said target data using a read head.

ADD A37

ADD B27